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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,654	06/28/2001	Manoel Tenorio	020431.0841	6772
53184 7590 04/25/2008 i2 TECHNOLOGIES US, INC. ONE i2 PLACE, 11701 LUNA ROAD DALLAS, TX 75234				
EXAMINER				
AL HASHEMI, SANA A				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/895,654

Applicant(s)

TENORIO, MANOEL

Examiner

Sana Al-Hashemi

Art Unit

2164

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is issued in response to applicant amendment filed 12/17/07.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-28 are

101 computer product

Claims 1, 9, 17, 25-28 are not directed to a process within the meaning of 101, since it is not a series of steps or acts being performed, but instead a program which when executed would cause a series of process steps or acts to occur. Claims 1, 9, 17, 25-28 are not directed to a machine within the meaning of 101, since it is not a part of a device or a combination of devices. Claims 1, 9, 17, 25-28 are not directed to a manufacture within the meaning of 101, since it is not an article produced from raw or prepared materials. Claims 1, 9, 17, 25-28 are not a composition of matter within the meaning of 101, since it is not a combination of two or more substances nor does it have any mass to be matter. Therefore, claims 1, 9, 17, 25-28 fail to fall within a statutory category of invention and is rejected as non-statutory on at least those grounds.

Claims 25-28 are directed to a software per se. Therefore they are not statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Vedula et al. (U.S. Patent 6,823,495).

Claim 1: Col. 1, line 24 refers to a global content directory in the form of the Internet. This directory is provided to buyers and sellers (col. 1, lines 27-28 "customers and trading partners"). FIG. 5 illustrates a graphical user interface which defines a schema translation tool which translates schema (4) to schema (10). The tool is coupled to the global content directory (coupled to Internet-----col. 17, lines 44-46). Since mapping is accomplished between the schemas, the schema translation tool is a mapping module.

The mapping module (graphical interface) receives a source schema (4) on the left side and target schema (10) on the right side.

Each schema is a taxonomy (i.e. a classification arrangement) comprised of a hierarchy of classes defined by records. For example, "Record 11" in the source schema (4) is a parent class and all indented items below "Record 11" are subclasses. The source and target taxonomies can be different from one another, such as illustrated in FIG. 5 where the arrangement of classes and subclasses on the left side is different from that on the right side.

Both the source schema and target schema define an ontology (i.e. relationships between records, such as the relationship of parent class to subclass or source schema to target schema).

As seen in FIG. 3C, each record has defined attributes, thus the ontologies in both the source schema and the target schema contain attributes.

Referring back to FIG. 5, classes (referring to either parent classes or subclasses) in the source schema can be associated to classes (referring to either parent classes or subclasses) in the target schema. The association is achieved by the mappings (16a) and (16b).

The ontology generation module is the processing engine (26) and map (28) illustrated in FIG. 2 which support the creation of the graphical interface in FIG. 5.

Vedula et al. differs in that the individual records are not specifically referring to products, but are generic business document records (col. 3, line 10). Forming the records to contain non-functional descriptive material, such as product information, would have been obvious to one of ordinary skill in the art (In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983): "when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability").

Claim 2: User input in the form of highlighting (18a in FIGS. 4A and 4B) achieves the function of indicating which source classes are to be associated with which target classes. The association is established when lines (16a) or (16b) link the source and target schemas. The definition of the users as "buyers" is non-functional descriptive material, obvious to the person of ordinary skill in the art (In re Gulack).

Nonetheless, either of the "customers or trading partners" (col. 1, lines 27-28) can be the claimed buyers or sellers providing input to the system.

Claim 3: FIG. 5 is a view of a graphical user interface, and thus is a graphical representation of the taxonomies of the source and target schemas as well as the associations between the schemas seen by the user. The definition of the users as "buyers" is non-functional descriptive material, obvious to the person of ordinary skill in the art (In re Gulack). Nonetheless, either of the "customers or trading partners" (col. 1, lines 27-28) can be the claimed buyers or sellers providing input to the system.

Claim 4: Within the source schema, some of the classes are leaf nodes, such as "Record 2" and "Record 8".

Claim 5: The mappings (16a) and 16(b) define intersections between the product ontologies of the source class and target class. A product ontology inherently defines at least some attribute of a product, such as the name of the product, so mappings become intersections of attributes. These mappings are also

ontologies (i.e. relationships) that further define both the source classes and target classes.

Claim 6: The mappings can define intersections between any classes (parent class or subclass) in either the source schema or target schema.

Claim 7: The subject matter of claim 7 only differs from Vedula et al. in that the classes in the source schema and target schema are not defined as being associated with a seller. In other words, the records do not define seller information. However, modifying the records to define seller information is a modification to include non-functional descriptive material which is considered obvious to one of ordinary skill in the art (In re Gulack, cited above).

Claim 8: The source records and target records are XML business documents. Any of the mapping linkages (16a or 16b) constitute pointers. Since either a single document or a set of documents constitutes a database, the mapping links define pointers between databases. Modifying the documents to refer to seller information would have been a modification to include non-functional descriptive material, and would have been obvious to one of ordinary skill in the art, as per In re Gulack.

Claim 9: See remarks for claim 1.

Claim 10: See remarks for claim 2.

Claim 11: See remarks for claim 3.

Claim 12: See remarks for claim 4.

Claim 13: See remarks for claim 5.

Claim 14: See remarks for claim 6.

Claim 15: See remarks for claim 7.

Claim 16: See remarks for claim 8.

Claim 17: See remarks for claim 1.

Claim 18: See remarks for claim 2.

Claim 19: See remarks for claim 3.

Claim 20: See remarks for claim 4.

Claim 21: See remarks for claim 5.

Claim 22: See remarks for claim 6.

Claim 23: See remarks for claim 7.

Claim 24: See remarks for claim 8.

Claim 25: See remarks for claim 1.

Claim 26: See remarks for claim 1-3 and 8.

Claim 27: See remarks for claims 1-3 and 8.

Claim 28: See remarks for claims 1-3 and 8.

Response to Arguments

Applicant's arguments filed 12/17/07 have been fully considered but they are not persuasive.

It is a well settled rule that a reference must be considered not only for what it expressly teaches but also for what it fairly suggests. See *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979) and *In re Lamberti*, 545 F.2d 747, 192 USPQ 278 (CCPA 1976) as well as *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA 1977) which indicates such fair suggestions to unpreferred embodiments must be considered even if they were not illustrated. Additionally, it is an equally well settled rule that what a reference can be said to fairly suggest relates to the concepts fairly contained therein, and is not limited by the specific structure chosen to illustrate such concepts. See *In re Bascom*, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

Applicant argues the Vedula fails to teach or disclose "An electronic commerce system for translating between one or more schemas".

Examiner disagrees. The Vedula reference discloses a the e-commerce in many location in the reference such as the Back Ground of the invention Col. 1, lines 32-44, and Fig. 14.

Applicant argues the reference fails to disclose "taxonomy comprising a hierarchy of class into which products many categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema".

Examiner disagrees. As stated in the Back Ground of the invention the Vedula reference disclose the use of XML and XSL schema and these schemas are become widely implemented to communicate between both (target and source schema) see Col. 2, lines 18-40.

Applicant argues the Vedula discloses a global content directory".

Examiner disagrees. It is well known that the internet is a global content directory even if the reference limits the use of the internet to internal communication.

Applicant argues the office action fails to establish a prima facie case of obvious over the Vedula.

Examiner disagrees. A prima facie case of obviousness has been established. Since the three steps have been met. First the primary reference discloses most of the claimed limitations. Second the missing limitation has been address with what considered to be a common knowledge in the database art. Third a motivation for modifying the reference with the modified feature in this case the product verses the individual records.

Applicant's arguments are primarily addressed to the three features added to amended claim 1. In particular, applicant argues that Vedula et al. lacks: (1) a global content directory providing buyers access to sellers, (2) a schema translation tool, and (3) the target schema having a different taxonomy than the source schema. All of these features are taught by Vedula et al. Col. 1, line 24 of Vedula refers to a global content directory in the form of the Internet. This directory is provided to buyers and sellers (col. 1, lines 27-28 "customers and trading partners").

FIG. 5 illustrates a graphical user interface which defines a schema translation tool which translates schema (4) to schema (10). The tool is coupled to the global content directory (coupled to Internet---col. 17, lines 44-46). Furthermore, the source and target taxonomies can be different from one another, such as illustrated in FIG. 5 where the arrangement of classes and subclasses on the left side is different from that on the right side.

With respect to claims 5, 13 and 21, applicant argues that Vedula does not teach determining the intersection of product attributes. This argument is not correct. The mappings (16a) and 16(b) define intersections between the product ontologies of the source class and target class. A product ontology inherently defines at least some attribute of a product, such as the name of the product, so mappings become intersections of attributes.

With respect to claims 6, 14 and 22, applicant argues that Vedula does not disclose an ontology generation module. This argument is not correct. The ontology generation module is the processing engine (26) and map (28) illustrated in FIG. 2 which support the creation of the graphical interface in FIG. 5.

Applicant also argues against an alleged assertion of Official Notice. This argument is moot, as assertion of Official notice has not been made. The rationale for obviousness is based on the finding of non-functional descriptive material in the claims, and the assertion that such non-functional descriptive material is considered to have been obvious, given the case law of *In re Gulack*.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is 571-272-4013. The examiner can normally be reached on 8Am-4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sana Al-Hashemi/
Primary Examiner, Art Unit 2164